BOOK REVIEW

Measuring and Evaluating Sustainability: Ethics in Sustainability Indexes

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Sustainable Urban Development

The concept of 'sustainability' has been pushed to the forefront of policymaking and politics as the world wakes up to the impacts of climate change and the effects of the rapid urbanisation and modern urban lifestyles (Yigitcanlar & Teriman, 2014). Climate change and fossil fuel-based energy policy have emerged as the biggest challenges for our planet, threatening both built and natural systems with long-term consequences. However, the threats are not limited to the impacts of climate change and unsustainable energy system only—e.g., impacts of rapid urbanisation, socioeconomic crises, governance hiccups are just to name a few (Yigitcanlar 2010a). Along with these challenges, successfully coping with the enormous transformations that our cities, societies and the environment have been going through during the last few decades, and their consequential impacts we are facing today, call for a more effective and resilient planning and development perspective. Scholars across the globe see 'sustainable urban development' as a contemporary paradigm to address these challenges, and provide an opportunity to form new mechanisms for building a desirable urban future (Goonetilleke et al. 2014). Sustainable urban development is perceived as improving the quality of life in a city, including ecological, cultural, political, institutional, socioeconomic components without leaving a burden—e.g., the result of a reduced natural capital and an excessive local debt, on the future generations—and thus forming 'sustainable cities' (Yigitcanlar 2010b). The need to protect the environment from the excessive ecological destruction of unregulated economic growth and conspicuous consumption is unquestionable, and with a common consensus sustainable urban development is seen as the main vehicle for such protection (Yigitcanlar & Teriman, 2014).

In the 21st century, urban sustainability has become a prominent element in the day-to-day debate on urban policy and the expression of sustainability policy in urban and environmental planning and development decisions (Yigitcanlar & Dur, 2010). While the origins of the sustainability discussion date back to the work of the Club of Rome, the Bruntland Report, and the Rio declaration, in recent years its critical importance has been highlighted through the adverse impacts of human activities—such as a rapidly changing climate and the severe effects of greenhouse gas emissions. In an atmosphere where civilisation is progressing and becoming more aware of the consequences of inconsiderate urban development decisions, implementing sustainable urban development policies has become an inevitable necessity. The provision of a built environment that is sustainable—and linked with and enhanced through natural environment—is still a central challenge for contemporary urban governance. Today, technology is purported as a panacea to all sustainability problems (Yigitcanlar & Lee 2014). However, answers to these problems should not be sought by just relaying on technology solution availability only. Even though in planning for sustainable urban development, technology applications are frequently utilised, establishing comprehensive sustainable urban development thinking within the broader community is critical. Determining existing sustainability challenges, through measuring and evaluating sustainability levels, is the very first step of establishing such awareness (Yigitcanlar 2010a).

Sustainability assessment is increasingly being viewed as an important tool to monitor the human-environment interaction at different temporal and spatial scales. It provides valuable information to assess the performance of the existing economic, social and environmental policies, plans and programmes by highlighting emerging problems (Dizdaroglu & Yigitcanlar, 2014). Furthermore, it contributes to the development of sustainable policies in terms of collecting information for planners and policymakers concerning the severity of environmental problems and their impacts on natural systems (Dizdaroglu et al., 2012). In recent years a large number of urban sustainability assessment

frameworks are developed to better inform policy formulation and decision-making processes (Dur & Yigitcanlar, 2014; Dur et al., 2014). This puts sustainability assessment or in other words 'sustainability indexing' in the heart of efforts in establishing comprehensive sustainable urban development thinking, along with the fundamental issue of 'ethics' in such indexing practices.

Sustainability Assessment and Ethics in Indexing

As the author of the book stated, the indexes used by local, national, and international governments to monitor progress toward sustainability do not adequately align with their ethical priorities and have a limited ability to monitor and promote sustainability. Therefore, this book on 'measuring and evaluating sustainability' aimed to provide readers with a theoretical and practical demonstration of how ethics and technical considerations can aid the development of sustainability indexes to overcome this division in the literature and aid sustainability initiatives. With this aim in mind, the book focuses on and attempts to address the interrelation between sustainability indexing and ethics, as ethical and technical considerations are intimately intertwined in the articulation of sustainability definitions and goals as well as in the basic assertions that contemporary life in general or particular actions or mindsets are unsustainable.

The content of the book covers various topics ranging from background on sustainability movements to indexing theory, from ethics for sustainability to environmental justice, and from indicator aggregation methods to ethics in indexes. The research reported in this book develops and illustrates methods of linking technical and normative concerns during the development of sustainability indexes. Particularly, guidelines for sustainability index development are combined with a pragmatic theory of ethics that enables ethical collaboration among people of diverse ethical systems. Using the resulting method of index development, the book takes an applied turn as it ethically evaluates multiple sustainability indexes developed and used by the European Commission, researchers, and local communities and suggests ways to improve these indexes—e.g., Environmental Protection Index, the Well-being of Nations, the Three-Dimensional Index of Sustainable Energy Development, Carbon Emissions Indicators, Eurostat's Sustainable Development Indicators, and so on. Although, the book covers aforementioned macro scale indexing practices, it fails to touch on many of the well-known mezzo and micro scale sustainability assessment indexing models—e.g., BEQUEST, BREEAM, DISPR, ILTIM, LEED, MUSIX, PICABUE, SPARTACUS and so on.

The book discusses why sustainability indexes do not meet ethics requirements and emphasises justice as it is the most prevalent ethical principle in the sustainability literature and most neglected in index development. It demonstrates that despite the implicit of technical and normative concerns on sustainability discourse and sustainable index development, guidelines for index development generally focus on technical considerations. The book advocates that sustainability indexes should be ethically sound before adoption or implementation. In other words, it argues ethics to be a part of the whole index development process. In addition to the ethical principles common to international sustainability initiatives, the book employs a variety of religious and philosophical traditions to ensure that the ethical evaluations performed in the book align with the ideals of the communities using the indexes and foster cross-cultural ethical dialogue. This is to say, a sound ethical base in indexing practices ensures that sustainability indexes are able to monitor progress towards comprehensive vision of sustainable urban development in which technical and normative considerations mutually influence each other and subsequently push society towards a sustainable urban future.

The book is an essential reading and an invaluable contribution to the rapidly expanding sustainable urban development and planning and indexing literatures. The findings are useful for policymaking, planning and development professional and academic circles in various interdisciplinary areas. I recommend the book for the readers of the *Australian Planner*.

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